abcam

ab326482

FITC Anti-Integrin alpha 4/CD49D antibody [9F10]

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.098% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	9F10
Purification technique	Size-exclusion chromatography
Specificity	The mouse monoclonal antibody 9F10 recognizes an extracellular epitope of CD49d (alpha 4 integrin), a 145-180 kDa type I transmembrane glycoprotein expressed on B and T cells, monocytes, eosinophils, basophils, NK cells, and dendritic cells, but not platelets.
Light chain type	kappa
Purification notes	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Target data

See full target information ITGA4

Function	Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415). ITGA4:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877). Integrin ITGA4:ITGB1 represses PRKCA-mediated L-type voltage-gated channel Ca(2+) influx and ROCK-mediated calcium sensitivity in vascular smooth muscle cells via its interaction with SVEP1, thereby inhibiting vasocontraction (PubMed:35802072).

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze, Store in the dark

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

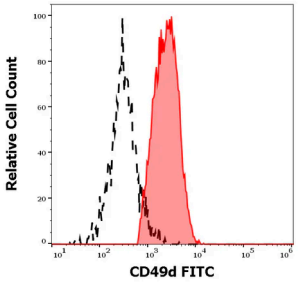
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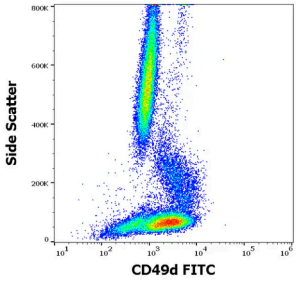
2 product images



Flow Cytometry - FITC Anti-Integrin alpha 4/CD49D antibody [9F10] (ab326482)

Integrin alpha 4/CD49D Flow Cytometry staining of human peripheral whole blood using mouse Anti-Integrin alpha 4/CD49D antibody

Separation of human CD49d positive lymphocytes (red-filled) from human blood debris (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab326482 (4 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - FITC Anti-Integrin alpha 4/CD49D antibody [9F10] (ab326482)

Integrin alpha 4/CD49D Flow Cytometry staining of human peripheral whole blood using mouse Anti-Integrin alpha 4/CD49D antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab326482 (4 µl reagent / 100 µl of peripheral whole blood).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.